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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,061	10/21/2003	Tomoyuki Goto	11-199	3392

23400 7590 02/27/2007  
POSZ LAW GROUP, PLC  
12040 SOUTH LAKES DRIVE  
SUITE 101  
RESTON, VA 20191

EXAMINER
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RAO, ANAND SHASHIKANT

ART UNIT	PAPER NUMBER
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2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/689,061

Applicant(s)

GOTO ET AL.

Examiner

Andy S. Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/6/06</u> .  | 6) <input type="checkbox"/> Other: ____                           |

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## **DETAILED ACTION**

### ***Specification***

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Breed et al., (hereinafter referred to as "Breed").

Breed discloses a vehicle occupant detection system (Breed: figure 2A), comprising: an auxiliary light projection apparatus for projecting auxiliary light which is within a predetermined range of wavelengths into a predetermined region of a vehicle interior (Breed: column 5, lines 53-57; column 6, lines 1-15), said predetermined region including a vehicle seat (Breed: column 25, lines 30-55), a camera apparatus for photographing an image of said predetermined region (Breed: column 19, lines 4-13), said image being expressed as digital data (Breed: column 26, lines 50-60), with light that is within at least a part of the range of visible wavelengths being excluded when photographing said image (Breed: column 23, lines 5-11), and an image processing apparatus for applying image processing to said data expressing said image (Breed: column 24, lines 1-25), to derive information indicative of a condition of an occupant of said vehicle seat (Breed: column 39 lines 15-32), as in claim 1.

Regarding claim 2, Breed discloses wherein said predetermined range of wavelengths of said auxiliary light includes at least a part of the near infra-red range, wherein said camera apparatus comprises a digital camera having a spectral sensitivity which extends to said part of the near infra-red range (Breed: column 5, lines 53-67; column 6, lines 1-16), and wherein said system comprises an optical filter disposed in a path of incident light which enters said digital camera, with said optical filter adapted to pass light that is within at least a part of said near infra-red range and to block light that is within a part of the range of visible wavelengths (Breed: column 39, lines 15-32), as in the claim.

Regarding claim 3, Breed discloses wherein said auxiliary light projection apparatus projects said auxiliary light irrespective of a level of brightness within said vehicle interior (Breed: column 5, lines 60-67), as in the claim.

Regarding claim 4, Breed discloses wherein said auxiliary light emitted from said auxiliary light projection apparatus is set at an emission output level such that said image photographed by said camera apparatus is not affected by reflections of said auxiliary light from glass surfaces of said vehicle interior, including surfaces of a windshield and side windows of said vehicle (Breed: column 39, lines 40-55), as in the claim.

Regarding claim 5, Breed discloses wherein said auxiliary light projection apparatus comprises a plurality of light sources (Breed: column 5, lines 63-67) which project auxiliary light into respectively different regions of said vehicle interior (Breed: column 18, lines 60-67), and wherein said light sources are successively activated in respective light emission intervals during an exposure interval of said camera apparatus (Breed: column 19, lines 1-5), as in the claim.

Regarding claim 6, Breed discloses wherein said camera apparatus is mounted on a front part of a ceiling of said vehicle interior at a location which is substantially midway between left and right sides of said vehicle interior (Breed: figure 21), as in the claim.

Regarding claim 7, Breed discloses wherein said auxiliary light projection apparatus is mounted on a front part of a ceiling of said vehicle interior at a location which is substantially midway between left and right sides of said vehicle interior (Breed: figure 21), as in the claim.

Regarding claim 8, Breed discloses wherein said information derived by said image processing apparatus is indicative of a position of a head of said occupant of said vehicle seat (Breed: column 27, lines 60-67), as in the claim.

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Regarding claim 9, Breed discloses wherein said information derived by said image processing apparatus is indicative of a size of a head of said occupant of said vehicle seat (Breed: column 27, lines 60-67; column 25, lines 40-45), as in the claim.

Regarding claim 10, Breed discloses wherein said predetermined region within said vehicle interior includes a position close to an exit aperture of an air bag corresponding to said vehicle seat (Breed: column 27, lines 45-50), as in the claim.

Regarding claims 11-12, Breed discloses wherein said predetermined region includes a position close to a head rest portion of said vehicle seat (Breed: column 28, lines 1-12), as in the claim.

Regarding claim 13, Breed discloses wherein said camera apparatus is mounted on said ceiling of said vehicle interior at a location which is intermediate between said air bag exit apparatus and said head rest portion of said vehicle seat, with respect to a longitudinal direction of said vehicle (Breed: figure 21), as in the claim.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao  
Primary Examiner  
Art Unit 2621

asr  
February 23, 2007

**ANDY RAO**  
**PRIMARY EXAMINER**

